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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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COMPLETE IF KNOWN

Application Number	09/835,077	Conf. No.	3869
Filing Date	April 12, 2001		
First Named Inventor	James O. Roberts		
Group Art Unit	2175-2173		
Examiner Name	Unknown - T. Hailu		
Attorney Docket No.	294438025US1		

Sheet 1 of 5

U.S. PATENT DOCUMENTS

*EXAMINER INITIALS	Cite No.	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		NUMBER	Kind Code (if known)			
TH	&	Application No. 09/216,193		Newell et al.	Filed 12/18/98	
	&	Application No. 09/541,326		Abbott et al.	Filed 4/2/00	
	&	Application No. 60/194,758		Newell et al.	Filed 4/2/00	
	&	Application No. 09/724,777		Abbott et al.	Filed 11/28/00	
	&	Application No. 09/724,902		Abbott et al.	Filed 11/28/00	
	*	4,916,441		Gombrich	4/10/90	
	*	5,032,083		Friedman	7/16/91	
	*	5,201,034		Matsuura et al.	4/6/93	
	*	5,208,449		Eastman et al.	5/4/93	
	*	5,214,757		Mauney et al.	5/25/93	
	*	5,227,614		Danielson et al.	7/13/93	
	*	5,335,276		Thompson et al.	8/2/94	
	*	5,416,730		Lookofsky	5/16/95	
	*	5,470,233		Fruchterman et al.	11/28/95	
	*	5,493,692		Theimer et al.	2/20/96	
	#	5,506,580		Whiting et al.	4/9/96	
	*	5,555,376		Theimer et al.	9/10/96	
	*	5,559,520		Barzegar et al.	9/24/96	
	*	5,568,645		Morris et al.	10/22/96	
	*	5,601,435		Quy	2/11/97	
	*	5,611,050		Theimer et al.	3/11/97	
	*	5,642,303		Small et al.	6/24/97	
	*	5,646,629		Loomis et al.	7/8/97	

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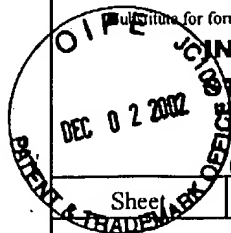
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		NUMBER	Kind Code (if known)			
TH	*	5,719,744		Jenkins et al.	2/17/98	
	*	5,726,660		Purdy et al.	3/10/98	
	*	5,751,260		Nappi et al.	5/12/98	
	*	5,781,913		Felsenstein et al.	7/14/98	
	*	5,790,974		Tognazzini	8/4/98	
	*	5,798,733		Ethridge	8/25/98	
	*	5,812,865		Theimer et al.	9/22/98	
	*	5,873,070		Bunte et al.	2/16/99	
	*	5,878,274		Kono et al.	3/2/99	
	*	5,902,347		Backman et al.	5/11/99	
	*	5,910,799		Carpenter et al.	6/8/99	
	*	5,938,721		Dussell et al.	8/17/99	
	*	5,948,041		Abo et al.	9/7/99	
	*	5,959,611		Smailagic et al.	9/28/99	
	#	5,983,335		Dwyer, III	11/9/99	
	*	5,991,687		Hale et al.	11/23/99	
	*	6,047,301		Bjorklund et al.	4/4/00	
	*	6,064,943		Clark, Jr. et al.	5/16/00	
	*	6,108,197		Janik	8/22/00	
	*	6,127,990		Zwern	10/3/00	
	#	6,294,953		Steeves	9/25/01	

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<div style="display: flex; align-items: center; justify-content: center;"> <div style="border: 2px solid black; border-radius: 50%; padding: 10px; margin-right: 10px; text-align: center;"> OLPE <small>Substitute for form 1449A/PTO</small> DEC 02 2002 <small>PATENT & TRADEMARK OFFICE</small> </div> <div> INFORMATION DISCLOSURE STATEMENT BY APPLICANT <small>(use as many sheets as necessary)</small> </div> </div>				COMPLETE IF KNOWN			
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		Office	Kind Code (if known)				
TH	*	PCT	WO 90/08361	The Scott Fetzer Company	7/26/90		
	*	PCT	WO 97/03434	Virtual I/O, Inc.	1/30/97	RECEIVED DEC 04 2002 Technology Center 2100	
	*	EPO	EP 0823 813A2	Kopin Corporation	2/11/98		
	*	JPO	05260188	Matsushita Electric Ind. Co. Ltd.	10/8/93		
	*	JPO	09091112	Toshiba Corp.	4/4/97		

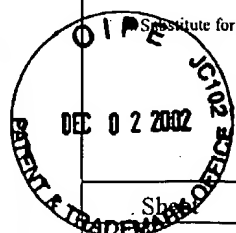
OTHER PRIOR ART-NON PATENT LITERATURE DOCUMENTS			
*EXAMINER INITIALS	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume/issue number(s), publisher, city and/or country where published.	T
TH	*	"Affective Understanding: Modeling and Responding to User Affect," http://www.media.mit.edu/affect/AC_research/understanding.html , pp. 1-3 [Accessed 2 Oct 1998].	
	*	"Alps GlidePoint," http://www.alps.com/p17.html , p. 1 [Accessed 2 Oct 1998].	
	*	"GyroPoint Technology," http://www.gyration.com/html/gyropoint.html , pp. 1-3 [Accessed 2 Oct 1998].	
	*	"Haptics," http://www.ai.mit.edu/projects/handarm-haptics/haptics.html , pp. 1-2 [Accessed 2 Oct 1998].	
	*	"Research Areas in Affective Computing," http://www.media.mit.edu/affect/ , p. 1 [Accessed 2 Oct 1998].	
	*	"Research on Affective Pattern Recognition and Modeling," http://www.media.mit.edu/affect/AC_research/recognizing.html , pp. 1-4 [Accessed 2 Oct 1998].	
	*	"Research on Sensing Human Affect," http://www.media.mit.edu/affect/AC_research/sensing.html , pp. 1-5 [Accessed 2 Oct 1998].	
	*	"Smart Rooms," http://vismod.www.media.mit.edu/vismod/demos/smartroom/ , pp. 1-3 [Accessed 2 Oct 1998].	
	*	"SmartDesk Home Page," http://vismod.www.media.mit.edu/vismod/demos/smartdesk/ , pp. 1-4 [Accessed 2 Oct 1998].	
	*	"The MIT Wearable Computing Web Page," http://wearables.www.media.mit.edu/projects/wearables/ , pp. 1-3 [Accessed 2 Oct 1998].	
	*	"Wearable Computer Systems for Affective Computing," http://www.media.mit.edu/affect/AC_research/wearables.html , pp. 1-5 [Accessed 2 Oct 1998].	
	#	Aoki, Hisashi et al., "Realtime Personal Positioning System for a Wearable Computer," 3 rd International Symposium on Wearable Computers, San Francisco, California, October 18-19, 1999	
	*	Bauer et al., "A Collaborative Wearable System with Remote Sensing," University of Oregon, February 1996	
	&	Bier, et al. "Toolglass and Magic Lenses: The See-Through Interface," Proceedings of Siggraph '93, Computer Graphics Annual Conference Series, ACM, pp. 73-80, Anaheim, California, 1993.	

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First Named Inventor	James O. Roberts	
Group Art Unit	2175-2173	
Examiner Name	Unknown T. Hailu	
Attorney Docket No.	294438025US1	

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OTHER PRIOR ART-NON PATENT LITERATURE DOCUMENTS

EXAMINER INITIALS	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume/issue number(s), publisher, city and/or country where published.	T
TH	*	Billinghurst, Mark and Thad Starner, "New Ways to Manage Information," <i>IEEE</i> , pp. 57-64, January 1999.	
	#	Bowskill, J. et al., "Wearable Location Mediated Telecommunications; A First Step Towards Contextual Communication," 3 rd International Symposium on Wearable Computers, San Francisco, California, October 18-19 1999	
	#	Dey, Anind K. et al., "The Conference Assistant: Combining Context-Awareness with Wearable Computing," 3 rd International Symposium on Wearable Computers, San Francisco, California, October 18-19, 1999	
	*	Finger et al., "Rapid Design and Manufacture of Wearable Computers," <i>Communication of the ACM</i> , Vol. 39, No. 2, February 1996, pp. 63-68	
	#	Golding, Andrew and Neal Lesh, "Indoor Navigation Using a Diverse Set of Cheap, Wearable Sensors," 3 rd International Symposium on Wearable Computers, San Francisco, California, October 18-19, 1999	
	*	Hull et al., "Towards Situated Computing," Hewlett-Packard Laboratories, HPL-97-66 (1997).	
	*	Kirsch, Dana, "The Sentic Mouse: A tool for measuring emotional valence," http://www.media.mit.edu/affect/AC_research/projects/sentic_mouse.html , pp. 1-2 [Accessed 2 Oct 1998].	
	*	Kortuem et al., "Context-Aware, Adaptive Wearable Computers as Remote Interfaces to 'Intelligent' Environments," University of Oregon, October 1998	
	#	Kortuem, Gerd, "When Cyborgs Meet: Building Communities of Cooperating Wearable Agents," 3 rd International Symposium on Wearable Computers, San Francisco, California, October 18-19, 1999	
	*	Lashkari, Yezdi et al., "Collaborative Interface Agents," <i>Proceedings of AAAI '94 Conference</i> , Seattle, Washington, August 1994.	
	#	Lehikoinen, Juha et al., "MEX: A Distributed Software Architecture for Wearable Computers," 3 rd International Symposium on Wearable Computers, San Francisco, California, October 18-19, 1999	
	#	Leonhardi, Alexander et al., "Virtual Information Towers - A Metaphor for Intuitive, Location-Aware Information Access in a Mobile Environment," 3 rd International Symposium on Wearable Computers, San Francisco, California, October 18-19, 1999	
	*	Lunt, Teresa F. et al., "Knowledge-Based Intrusion Detection," <i>Proceedings of the Annual Artificial Intelligence Systems in Government Conference</i> , IEEE Comp. Soc. Press, Vol. Conf. 4, 1989, pages 102-107.	
	*	Maes, Pattie, "Agents That Reduce Work and Information Overload," <i>Communications of the ACM</i> , Vol. 37, No. 7, July 1994.	
	*	Mann, Steve, "'Smart Clothing': Wearable Multimedia Computing and 'Personal Imaging' to Restore the Technological Balance Between People and Their Environments," <i>ACM Multimedia</i> , November 1996, pp. 163-174	
	*	Metz, Cade, "MIT: Wearable PCs, Electronic Ink, and Smart Rooms," <i>PC Magazine</i> , p. 192-193, June 1998.	
	*	Oakes, Chris, "The Truman Show Realized?," http://www.wired.com/news/news/technology/story/15745.html , pp. 1-4 [Accessed 21 Oct 1998].	
	*	Picard, R.W. and Healey, J., "Affective Wearables," <i>Personal Technologies</i> vol. 1: 231-240, MIT Media Laboratory (1997).	

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OTHER PRIOR ART-NON PATENT LITERATURE DOCUMENTS

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TH	*	Rekimoto et al., "The World through the computer: Computer Augmented Interaction with Real World Environments," ACM, November 1995, pp. 29-36	
	*	Rhodes, Bradley, "WIMP Interface Considered Fatal," http://rhodes.www.media.mit.edu/people/rhodes/Papers/no-wimp.html , pp. 1-3 [Accessed 2 Oct 1998].	
	*	Rhodes, Bradley, J. "The Wearable Remembrance Agent: A System for Augmented Memory," Proceedings of the First International Symposium on Wearable Computers (ISWC '97), Cambridge, MA, October 13-14, 1997.	
	*	Sato, J. et al., "Autonomous Behavior Control of Virtual Actors Based on the AIR Model," Proceedings Computer Animation, June 5, 1997.	
	#	Schneider, Jay and Jim Suruda, "Modeling Wearable Negotiation in an Opportunistic Task Oriented Domain," 3 rd International Symposium on Wearable Computers, San Francisco, California, October 18-19 1999	
	*	Smailagic et al., "Matching interface design with user task: Modalities of Interaction with CMU Wearable Computers," IEEE Personal Communications, February 1996, pp. 14-25	
	#	Smailagic, Asim et al., "MoCCA: A Mobile Communication and Computing Architecture," 3 rd International Symposium on Wearable Computers, San Francisco, California, October 18-19, 1999	
	*	Starner et al., "Visual Contextual Awareness in Wearable Computing," Media Lab, MIT, October 1998	
	*	Tan, Hong Z. and Alex Pentland, "Tactual Displays for Wearable Computing," IEEE, Massachusetts Institute of Technology Media Laboratory, pp. 84-88, 1997.	
	#	Yang, Jie et al., "Smart Sight: A Tourist Assistant System," 3 rd International Symposium on Wearable Computers, San Francisco, California, October 18-19, 1999	

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